

REMARKS

In the Office Action dated July 21, 2009, claims 92-117 were pending. Claims 114-115 were withdrawn from consideration for directed to a non-elected invention. Claims 92-113 and 116-117, including SEQ ID NO: 11 encoding SEQ ID NO: 12, were examined and rejected. The claims and the disclosure were also objected to on several formal grounds.

This Response addresses each of the Examiner's rejections and objections. Applicants therefore respectfully submit that the present application is in condition for allowance. Favorable consideration of all pending claims is therefore respectfully requested.

Substance of Examiner Interview

A telephonic interview was conducted on November 20, 2009 between the undersigned attorney and Examiner Baum. The undersigned attorney discussed with the Examiner claim language that would overcome the 35 U.S.C. §112, first paragraph rejections. Applicants, through the undersigned, wish to thank Examiner Baum for the courtesy and assistance extended to Applicants during the interview. In accordance with the discussion during the interview, Applicants have amended the claims to be placed in condition for allowance.

Formal Objections

Figure 26 is objected to because the text in the dendogram is illegible.

Applicants will provide a replacement sheet of Figure 26 as soon as it is completed.

Claims 92, 100, 103 and 116 are objected to for reciting "selected from the listing consisting of" or "selected from the listing of", instead of "selected from the group consisting of". Claim 113 is objected to for reciting "plant of any one of claims 106".

The claims have been amended accordingly.

Withdrawal of the objections is therefore respectfully requested.

35 U.S.C. §112, Second Paragraph

Claims 92-113 and 116-117 are rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite, for reciting "at least about" and "high stringency conditions".

In an effort to advance prosecution, the term "about" and references to "high stringency conditions" have been removed from the claims. Withdrawal of the rejection is therefore respectfully requested.

35 U.S.C. §112, First Paragraph (Written Description & Enablement)

Claims 92-113 and 116-117 are rejected under 35 U.S.C. §112, first paragraph, for allegedly failing to comply with both the written description and the enablement requirements.

In an effort to favorably advance prosecution, Applicants have amended the claims to more clearly define certain preferred embodiments of the invention. As amended, the claims are directed to *inter alia* nucleic acid molecules characterized as comprising the nucleotide sequence of SEQ ID NO: 11, a nucleotide sequence having at least 95% identity after optimal alignment to SEQ ID NO:11, a nucleotide sequence encoding the amino acid sequence set forth in SEQ ID NO:12; or a nucleotide sequence encoding an amino acid sequence having at least 95% identity after optimal alignment to SEQ ID NO: 12. Based on the telephone interview, Applicants believe that the Examiner would favorably consider the claims as presently amended.

On page 9, middle paragraph of the Office Action, the Examiner has questioned the function, if any, of a nucleic acid comprising SEQ ID NO: 11 (FMT gene) by itself, independent of an F3'5'H gene. The Examiner notes that Applicants have not disclosed any examples in

which only the FMT gene of SEQ ID NO: 11 is transformed into a plant to produce a change in flower color.

Applicants respectfully submit that the specification discloses that the FMT gene was used in combination with an F3'5'H gene in order to achieve a functional result. Such disclosure is adequate for purposes of enablement of claims directed to the FMT gene – namely, the specification teaches how to use the claimed FMT nucleic acid molecule, e.g., use the claimed FMT nucleic acid molecule together with an F3'5'H gene known in the art. Further, the text on page 82, first paragraph of the specification, explains why an F3'5'H gene is introduced together with the FMT gene. An F3'5'H gene is needed to produce the precursors of malvidin pigments in the transformed plant cells, which can then be converted by the FMT gene to malvidin pigments.

In view of the foregoing, it is respectfully submitted that the present claims are fully supported by the specification. As such, withdrawal of the rejections under 35 U.S.C. §112, first paragraph, is respectfully requested.

35 U.S.C. §102, Claim Rejections

Claims 92 and 95-100 are rejected under 35 U.S.C. §102(b) as anticipated by Gauthier et al. (GenBank Sequence Accession No. U16794, published in 1995), taken with the evidence of Joshi et al. (*Plant Molecular Biology* 37: 663-674, 1998). The Examiner has maintained the rejection because the recitation "high stringency conditions" is not defined and has been interpreted to mean any conditions, including low stringency conditions. Further, the Examiner states that although Gauthier et al. do not explicitly disclose that the FMT protein is a class I S-adenosyl-L-methionine O-methyltransferase which acts on anthocyanin molecule, such

a feature is inherent to the FMT protein disclosed by Gauthier et al. Joshi et al. also disclose that their 3' flavonoid O-methyltransferase is an S-adenosyl-L-methionine O-methyltransferase.

Applicants respectfully submit that the claimed subject matter, as presently recited, is not disclosed by Gauthier et al. Withdrawal of the rejection is therefore respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Xiaochun Zhu', with a long horizontal flourish extending to the right.

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